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FCC MAIL ROOM

North Carolina Department of Crime Control and Public Safety
Division of State Highway Patrol

James B. Hunt Jr., Governor
Richard H. Moore, Secretary

January 29, 1998

E. W. Horton, Colonel

Federal Communications Commission
Office of the Secretary
1919 M Street, N.W., Room 8010
Washington, DC 20554

RE: Request To Modify The Region 31 Plan - **PR Docket # 93-150**

Enclosed is an original and 5 copies of a revised Region 31 Plan. The Region 31 committee requested APCO to perform a repack of the frequencies in order to better utilize the channels and still conform to the guidelines of the NPSPAC assignments. The repack is included in the enclosed revised plan.

The Region 31 Committee respectfully request the FCC process this request for modification so that we can better utilize the spectrum that has been made available to Public Safety.

Should you have questions, please call me at 919-733-7956 or contact me via email at hmeacombs@ncshp.org.

Sincerely,

Harold Meacombs, Region 31 Chairman
NC Highway Patrol
1300 Blue Ridge Road
Raleigh, NC 27607

HM:gcs

cc: Joy Alford, FCC
APCO AFC
Carl Vancott, Region 31 Secretary
Dyke Hostettler, NC APCO Frequency Advisor
Richard Roley, Region 10 Chairman
Boykin Roseborough, Region 37 Chairman
Ron Farris, Region 39 Chairman
David Warner, Region 42 Chairman

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**FCC REGION 31
800 MHz REGIONAL
PUBLIC SAFETY NATIONAL PLAN
(821-824/866-869 MHz)**

NORTH CAROLINA

REVISED
November 20, 1997

D - R - A - F - T

Mr. Harold Meacombs, Chairman
North Carolina Highway Patrol
1300 Blue Ridge Road
Raleigh, North Carolina 27607
Telephone: (919) 733-7956

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**FCC REGION 31
800 MHz REGIONAL
PUBLIC SAFETY NATIONAL PLAN
(821-824/866-869 MHz)**

NORTH CAROLINA

1 PREFACE

- 1.1 This document is the **REVISED** FCC Region 31 North Carolina Regional 800 MHz Communications Plan. The document was developed by the members of the North Carolina Regional Communications Planning Committee (NCRPC) through participation in the committee and subcommittee meetings conducted since the formation of the Committee on February 21, 1989. The document has undergone several revisions since the inception of the document. The document was previously submitted to the Federal Communications Commission in November of 1991. This November 20, 1997 document replaces the previous plan accepted by the FCC dated March 9, 1993 under PR Docket 93-150.
- 1.2 Sections 1.0 (Preface) through 43.0 (Term office) were the responsibility of the Administrative Subcommittee which served as the original writing group for these sections. Sections 44.0 (Technical Regional Plan Requirements) through 72.0 (Use of Planning Cells for Determination of Allocations in 800 MHz) was the responsibility of the Technical Subcommittee which functioned as the writing group for these sections.
- 1.3 The technical sections have been revised to accommodate the Federal Communications Commissions requirement that the 800 MHz frequencies be packed by the Associated Public-Safety Communications Officers, Inc. (APCO), which serves as the frequency coordinator for the 800 MHz spectrum.

2 METHODOLOGY FOR PLAN DEVELOPMENT

- 2.1 This document has evolved through the continued efforts of the two writing group subcommittees refining their respective sections of the document. Through dissemination and discussion of the draft documents, further comment and input was solicited from all interested individuals and agencies.
- 2.2 All comments or recommendations received have been incorporated into this current document. Any further requests for change in the plan must be specific and clearly referenced to a paragraph number in this document. Comments must include specific recommendations and rationale for change or refinement and include the exact text of how a section should be worded or changed.
- 2.3 Any recommendation for inclusion of new sections must be provided with instructions showing where the new text should be inserted in the plan. The respective responsible

subcommittee will review each recommendation for change or addition and will incorporate the content as recommended or as acted upon by the subcommittee.

- 2.4 Both the technical and the administrative plan sections are complete and the Subcommittee Chairmen of both subcommittees have recommended to the Chairman of the Planning Committee that the plan be submitted.

3 INTRODUCTION

- 3.1 In December 1983, the United States Congress directed the Federal Communications Commission (FCC) to establish a plan that would ensure the communications needs of state and local public safety authorities would be met. By Notice of Inquiry, over 300 comments were received and evaluated by the Commission. This resulted in the recognition of public safety agency needs and the subsequent allocation of an additional 6 megahertz of radio spectrum for public safety use nationwide. The FCC additionally recognized the necessity of developing a National Plan to promote interoperability among public safety providers and to insure an efficient use of the newly allocated spectrum.
- 3.2 Recognizing the importance of the public safety agencies participation in the development of the National Plan, the FCC established the National Public Safety Planning Advisory Committee (NPSPAC). With open membership, NPSPAC provided the opportunity for the public safety community and other interested members of the public to participate in an overall spectrum management approach by recommending policy guidelines, technical standards, and procedures to satisfy public safety needs for the foreseeable future.
- 3.3 After consideration of NPSPAC's Final Report and comments filed in FCC Docket No. 87-112, the FCC issued a Report and Order on December 18, 1987. By this Commission action the FCC adopted policies, procedures and rules that constitute a national plan for public safety services. In particular the Commission adopted service rules and technical standards for the 821-824/866-869 MHz bands, which the Commission allocated for public safety use in an order adopted July 24, 1986. Included within the Report and Order are the requirements for the structure of the National Plan and guidelines for the development of regional plans.
- 3.4 The National Plan reflects the FCC's regulatory objective of maximizing spectrum efficiency and ensuring sufficient flexibility to accommodate specific communications requirements in different areas of the United States. The National Plan serves as an umbrella document under which regional plans can be developed and implemented.
- 3.5 When the Federal Communications Commission announced the 800 MHz allocation of reserve radio frequencies to Public Safety Radio Services and Special Emergency Radio Services (SERS) in July 1986, they mandated that a National Plan outlining the use of public safety radio frequencies be in place before any agency would receive channels from this new allocation. As part of this mandate, Regional Plans conforming to the National Plan were to be developed.
- 3.6 A Regional Plan for 800 MHz radio spectrum usage by public safety agencies in the North Carolina Region is to be written by the North Carolina Regional Planning Committee.
- 3.7 This group, representing a cross-section of Public Safety and Special Emergency Radio Service radio users in North Carolina has among its members, the North Carolina APCO

frequency advisors, as well as members from the categories of eligible radio users of the 800 MHz reserve spectrum.

4 COMMITTEE PURPOSE

- 4.1 The purpose of the North Carolina 800 MHz Regional Planning Committee is to provide the forum and management mechanism to organize, develop, refine, and submit to the Federal Communications Commission, an approveable plan for utilization of the 6 MHz of 800 MHz radio spectrum designated by the FCC for Public Safety and Special Emergency Radio Service usage within North Carolina FCC Region 31 and to serve as the contact point for North Carolina with adjacent FCC Planning Regions, the Federal Communications Commission and such other organizations as may be required for future plan revision.

5 AUTHORITY

- 5.1 Authority for the Regional Planning Committee to carry out its stated purpose and tasks is derived from the Federal Communications Commission Report and Order, Docket 87-112. Participants in the formation of the Regional Planning Committee represent interested parties from both the Public Safety and the Special Emergency Radio Services.
- 5.2 Principles Governing the procedures for the development and adoption of the North Carolina 800 MHz Plan.
- 5.3 The Federal Communications Commission empowered the formation of the Regional Plan by adoption of the Final Report and Order, FCC Docket 87-112. The North Carolina Regional Plan Steering committee has adopted a policy of voluntary participation in the original formation of the Planning Committee in accordance with the following principles:
- 5.4 Timely and adequate notice of all persons likely to be affected by the plan, or known to have active interest in the plans formation.
- 5.5 Opportunity for all affected interests to participate in the deliberations, discussions, and decisions concerned both with the procedural and substantive matters affecting the proposed plan.
- 5.6 Maintenance of adequate records of discussions, decisions, and technical data accumulated during the plans development.
- 5.7 Timely publication and distribution of minutes of meetings of the Regional Planning Committee and its Subcommittees.
- 5.8 Maintenance of records official drafts of the proposed plan, proposed amendments, action on amendments, and final promulgation of the 800 MHz Regional Plan.

6 FORMATION AND DISCHARGE OF REGIONAL COMMITTEE

- 6.1 OFFICIAL NAME - The Official Name of the committee is:

The FCC Region 31 - North Carolina Regional Communications Planning Committee
(NCRCPC)

6.2 ESTABLISHMENT

Acting under the directive of the Federal Communications Commission, the Associated Public-Safety Communications Officers, Inc. (APCO) identified Mr. Sanford Smith as the Official Convener for the North Carolina (Region 31) Planning Region. In the capacity of convener, Mr. Smith with the assistance of an ad hoc planning committee convened the first official meeting of the committee in the Blueroom of the Greensboro Coliseum on February 21, 1989. The following individuals attended the first official meeting:

Sanford Smith, Convener	City of Greensboro
Don Mabe	Forsyth County Fire Department
Marvin S. Heller	Raleigh-Wake County EOC
Jeff Pegram	NC State Office of EMS
Edward Rankin	Durham Police Department
Cliff Link	City of Charlotte
Carl C. Van Cott	NC State Office of EMS
Harold Meacombs	NC State Highway Patrol
Max Bloodworth	NC State Highway Patrol
Max Hopper	Motorola, Inc.
Billy Vass	City of High Point
L. Richard Nifong	City of High Point
John C. Trail	City of Charlotte
Marcia Simmons	Charlotte Fire Department
Lonnie J. Blake	Charlotte Police Department
Warren Eib, Jr.	RAM Communications Consultants, Inc.
Jon D. Jarvis	Winston Salem Police Department
Ed Howard	C.T.A., Inc.
Don Beuerle	C.T.A., Inc.
T. C. Lemonds	Greensboro Fire Department
R. E. Marine, Jr.	Greensboro Police Department
Larry L. Thomas	Guilford County EMS
Donna L. Langley	General Electric Mobile Radio
Danny Hickman	Wilson County Communications
Bill Fivek	Motorola, Inc.
Larry Simmons	Motorola, Inc.

7 INITIAL MEMBERSHIP

- 7.1 The initial membership of the North Carolina Regional Planning Committee was established at the time of the first convened official meeting of the committee and includes those persons listed above. Additional membership shall consist of those persons completing and submitting a membership application to the membership secretary.

8 PRELIMINARY ORGANIZATION

- 8.1 The official membership of the Regional Planning Committee shall consist of voluntary planning participant members from public safety or local government agencies eligible to license and operate in the new Public Safety and Special Emergency Radio Service bands of 821-824/866-869 MHz. Other individuals which have an expressed interest in the use of the radio spectrum, but are not eligible to license in the service, may serve on the planning committee, but may not vote on official actions of the committee.

9 **ELECTION OFFICERS**

- 9.1 Officers for the North Carolina Regional Planning Committee shall be elected by the initial membership at the first convened official meeting of the committee.

10 **STRUCTURE OF REGIONAL PLANNING COMMITTEE**

- 10.1 The Regional Planning Committee shall be administered by an Executive Committee and five operating subcommittees identified as the Administration Subcommittee; the Technical Subcommittee; the Western Geographic Subcommittee; the Central Geographic Subcommittee; and, the Eastern Geographic Subcommittee. All Executive members shall be full voting members of the Regional Planning Committee.
- 10.2 Subcommittee Assignments - Every member of the Regional Planning Committee shall be assigned by the Membership Secretary to one of the identified subcommittees upon joining the Regional Planning Committee.

11 **EXECUTIVE COMMITTEE**

- 11.1 The Executive Committee shall be comprised of the: Chairman; Vice-Chairman; Secretary/Treasurer; Membership Secretary; Administrative Subcommittee Chairman; Technical Subcommittee Chairman; Eastern Subcommittee Chairman; Central Subcommittee Chairman; and, the Western Subcommittee Chairman.

12 **DUTIES AND RESPONSIBILITIES OF THE EXECUTIVE COMMITTEE**

- 12.1 The Executive Committee shall be responsible for the administration of the Regional Committee in directing the development of the North Carolina 800 MHz Regional Plan.

13 **CHAIRMAN**

- 13.1 The Chairman shall be elected by the membership of the Regional Planning Committee during a duly called meeting.
- 13.2 The duties and responsibilities of the Chairman are as follows:
- 13.2.1 Scheduling, Calling and Chairing meetings of the Executive Committee;
- 13.2.2 Scheduling, Calling and Chairing meetings of the Regional 800 MHz Regional Planning Committee;
- 13.2.3 Overseeing the direction of the regional plan development activities of the Regional Planning Committee;
- 13.2.4 Appointing subcommittee chairmen for conformation by the Executive Committee;
- 13.2.5 Naming of nominating committees;
- 13.2.6 Serving as the point of contact for the committee and handling correspondence for the regional planning committee;

13.2.7 Conveyance of the final developed Regional Plan to the Federal Communications Commission.

13.3 The Chairman may be removed from office by majority vote of the membership of the planning committee during a duly called meeting.

14 VICE CHAIRMAN

14.1 The Vice Chairman shall be elected by the membership of the Regional Planning Committee during a duly called meeting.

14.2 The duties and responsibilities of the Vice Chairman are as follows:

14.2.1 Assist the Chairman to conduct the business of the Regional Planning Committee;

14.2.2 Serve as replacement should the Chairman be unable to attend meetings or complete his responsibilities as Chairman, until a new Chairman can be elected.

14.3 The Vice Chairman may be removed from office by majority vote of the membership of the Planning Committee during a duly called meeting.

15 SECRETARY/TREASURER

15.1 The Secretary/Treasurer is elected by the membership of the Regional Planning Committee during a duly called meeting.

15.2 Duties of the Secretary/Treasurer

15.2.1 Maintain the official meeting minutes of the Executive Council Meetings and Regional Planning Meetings.

15.2.2 Maintain the minutes and other business documents of the Planning Committee.

15.2.3 Maintain the financial records and bank accounts of the Committee and make financial disbursements as directed by the Executive Committee.

15.3 The Secretary/Treasurer may be removed from office by majority vote of the membership of the Planning Committee during a duly called meeting.

16 MEMBERSHIP SECRETARY

16.1 The Membership Secretary is elected by the membership of the Regional Planning Committee.

16.2 Duties of the Membership Secretary

16.2.1 Receive and process applications for membership in the Regional Committee;

16.2.2 Maintain the official membership roster of the Regional Planning Committee and determine applicant members classification;

- 16.2.3 Assign new members to operational subcommittees and orientate new members to the activity of the subcommittee;
- 16.2.4 Take attendance at each official meeting and incorporate the attendance listing into the official meeting minutes.
- 16.3 The Membership Secretary may be removed from office by majority vote of the membership of the Planning Committee during a duly called meeting.

17 ADMINISTRATIVE SUBCOMMITTEE CHAIRMAN

- 17.1 The Administrative Subcommittee Chairman shall be appointed by the Regional Planning Committee Chairman and be confirmed by majority vote of the Executive Committee.
- 17.2 Duties of the Administrative Subcommittee Chairman:
 - 17.2.1 The Administrative Subcommittee Chairman shall chair the meetings of the Administrative Subcommittee and direct the development of the administrative, procedural and financial portions of the Regional Plan.
- 17.3 The Administrative Subcommittee Chairman may be removed from office by majority vote of the Executive Committee during a duly called meeting.

18 TECHNICAL SUBCOMMITTEE CHAIRMAN

- 18.1 The Technical Subcommittee Chairman shall be appointed by the Regional Planning Committee Chairman and confirmed by majority vote of the Executive Committee.
- 18.2 The Technical Subcommittee Chairman shall be qualified by education and experience to serve as the engineering and technical advisor to the Regional Planning Committee.
- 18.3 Duties of the Technical Subcommittee Chairman
 - 18.3.1 The Technical Subcommittee Chairman shall chair the meetings of the Technical Subcommittee and be responsible for directing the development of the frequency allocations, engineering aspects and technical content of the Regional Plan.
 - 18.3.2 The Technical Subcommittee Chairman may be removed from office by a majority vote of the Executive Committee during a duly called meeting.

19 GEOGRAPHIC SUBCOMMITTEE CHAIRMEN

- 19.1 The Geographic Subcommittee Chairmen shall be appointed by the Regional Planning Committee Chairman and be confirmed by majority vote of the Executive Committee.
- 19.2 Each Geographic Subcommittee Chairman shall reside within the geographic region which he represents.
- 19.3 Duties of the Geographic Subcommittee Chairmen
 - 19.3.1 The Geographic Subcommittee Chairmen shall serve as the primary point of contact for the Regional Planning Committee within their respective geographic region. The Geographic

Subcommittee Chairmen shall serve on the Executive Committee and represent their respective geographic region on the Executive Committee and during formulation of the North Carolina Regional Plan.

- 19.4 The Geographic Subcommittee Chairmen may be removed from office by majority vote of the Executive Committee during a duly called meeting.

20 QUORUM

- 20.1 A quorum of the Regional Planning Committee shall consist of the members present at any given duly called meeting.

21 MAJORITY

- 21.1 During a duly called meeting a majority shall consist of 51 percent (51%) of the members present and voting.

22 PROXY VOTING

- 22.1 An official voting Planning Committee member may transfer his vote by writing to the Membership Secretary and designating an individual to act as a proxy. An individual may not hold nor exercise proxies for more than one member in any committee or subcommittee. The one man, one vote precept shall prevail.

23 DISSOLUTION OF COMMITTEE

- 23.1 Upon dissolution of the North Carolina Regional Communications Planning Committee, all assets shall be distributed for one or more exempt purposes within the Internal Revenue Code, or corresponding section of any future Federal tax code, or shall be distributed to the Federal Government, or to the State or local government for a public purpose.

24 MEMBERSHIP QUALIFICATIONS

- 24.1 Any entity agency or subagency chartered in North Carolina which is eligible to be licensed under subparts B or C of FCC Rules Part 90. Each agency or subagency of a governmental entity which is entitled to hold a license in one or more of the radio services shall be considered to be a separate entity up to a maximum of one agency or subagency for each radio service. For example, a City could have separate entities for local government, police, fire, highway maintenance, forestry and special emergency.

25 MEMBERSHIP APPLICATION PROCESS

- 25.1 All individuals desiring to be routinely informed of the activities of the Committee shall request membership in the committee by completion of a membership application form. The application form with any required administrative fees shall be submitted to the Membership Secretary of the Regional Planning Committee. The Membership Secretary shall review the application and make recommendation to the Chairman for acceptance or rejection of the application.
- 25.2 Individuals are not eligible to be Official Voting Members. Official Voting Membership shall be reserved to governmental agencies, organizations, or corporations chartered in North

Carolina and eligible to hold radio license in the Public Safety or Special Emergency Radio Service.

- 25.3 Any agency desiring to be identified as an Official Voting Member Agency of the NCRPC shall complete an application form and submit with any required administrative fees to the Membership Secretary of the Regional Planning Committee. The application shall clearly designate the name of the person that will serve as the point of contact for the agency, and be responsible for voting on behalf of the agency. The Membership Secretary shall review the application and make recommendation to the Chairman for acceptance or rejection of the application.
- 25.4 The Chairman shall acknowledge by letter the acceptance or rejection of the applicant agency as a voting member of the NCRPC. If the application is rejected, the Chairman shall notify the applicant of the reason for the rejection.
- 25.5 Committee members and member agencies are responsible for providing to the Membership Secretary any updated information concerning changes in agency name, address, telephone number, changes in employment status, or changes in naming the official representative to the NCRPC.

26 EASTERN SUB-REGIONAL GEOGRAPHIC COMMITTEE COUNTIES

- 26.1 Brunswick; Columbus; New Hanover; Pender; Carteret; Craven; Duplin; Green; Jones; Lenoir; Onslow; Pamlico; Wayne; Beaufort; Bertie; Hertford; Martin; Pitt; Camden; Chowan; Currituck; Dare; Gates; Hyde; Pasquotank; Perquimans; Tyrrell; Northampton; Halifax; Nash; Edgecombe; Wilson; and, Washington.

27 CENTRAL SUB-REGIONAL GEOGRAPHIC COMMITTEE COUNTIES

- 27.1 Alamance; Caswell; Guilford; Randolph; Rockingham; Davidson; Anson; Montgomery; Moore; Richmond; Davie; Forsyth; Stokes; Surry; Yadkin; Chatham; Durham; Lee; Orange; Wake; Franklin; Granville; Person; Vance; Warren; Cumberland; Harnett; Sampson; Bladen; Hoke; Robeson; and, Scotland.

28 WESTERN SUB-REGIONAL GEOGRAPHIC COMMITTEE COUNTIES

- 28.1 Cherokee; Clay; Graham; Haywood; Jackson; Macon; Swain; Buncombe; Henderson; Madison; Transylvania; Cleveland; McDowell; Polk; Rutherford; Alleghany; Ashe; Avery; Mitchell; Watauga; Wilkes; Yancey; Alexander; Burke; Caldwell; Catawba; Cabarrus; Gaston; Iredell; Lincoln; Mecklenburg; Rowan; Stanly; and, Union.

29 CLASSIFICATION OF REGIONAL COMMITTEE MEMBERS

- 29.1 Government Members - An individual who is employed by a government entity, agency or subagency which satisfies criteria of membership qualification shown above. A person who serves in a voluntary capacity of an agency which operates under provisions of the Federal Communications Commission Rules designated under membership qualifications shall be considered a government member.
- 29.2 Commercial Members - An individual who is an employee of a company which designs, manufacturers, sells, services, maintains, leases, rents or provides consulting services for profit by the development, implementation, operation or training of personnel systems or

equipment utilized by eligible members described in membership qualifications listed above.

- 29.3 Affiliate Members - An individual or agency interested in participating but not eligible for membership as described in membership qualifications.

30 CHANGE IN MEMBERSHIP CLASSIFICATION

- 30.1 A member who has a change in employment which would affect membership classification shall so inform the membership secretary in writing on letterhead stationary of the new agency or subagency. The Membership Secretary shall assign the individual to the member classification in accordance with the change of employment.

31 ADMINISTRATIVE FEES

- 31.1 The Executive Committee may establish a nominal fee structure to defray the costs for printing, copying, mailing, distribution and other administrative costs associated with the development of the plan.
- 31.2 Administrative fees shall be uniformly applied and collected from all agencies or members.

32 VOTING

- 32.1 All Planning Committee members are entitled to vote on administrative matters such as election officers, committee administrative procedures, committee bylaws and determination of when formal balloting of the plan documents are required. All members of the Planning Committee may additionally comment on Committee or Subcommittee ballot items or actions and may participate in reviewing actions such as official voting.

33 OFFICIAL VOTE

- 33.1 Only the ballots and votes of designated Agency Official Voting members shall be counted in the official vote on Planning Committee ballot actions. Each member organization shall clearly indicate the name of its Official Voting Member.

34 OFFICIAL VOTING MEMBER

- 34.1 Official Voting Membership shall be limited to agencies that are eligible to hold radio license in the 800 MHz band or the Public Safety Radio Service or Special Emergency Radio Service under FCC Part 90 Rules and Regulations.
- 34.2 Each eligible membership agency shall, at the time of its original application for membership, designate to the Membership Secretary the official point of contact for that organization and the person responsible for casting the Official Vote of the member agency.

35 VOTING PROVISIONS

- 35.1 For official balloted items, only one voting member shall be designated for each member agency or organization. The voting member may be changed by written notification of the Membership Secretary. All such notifications of change in name of voting member shall be received at least seven days prior to any official ballot by the Regional Planning Committee. All changes shall be confirmed in writing to the Membership Secretary.

36 **RULES FOR CONDUCT OF BUSINESS**

36.1 Meetings shall be governed by "Robert's Rules of Order"

37 **FISCAL YEAR**

37.1 The Fiscal Year for the NCRPC shall begin January 1 and end December 31.

38 **OPEN MEETINGS**

38.1 The meetings of committees and subcommittees shall be open to all parties having an interest in the activities of the planning committee.

39 **CLOSED MEETINGS**

39.1 It is permissible to hold closed meetings of the Executive Committee when technical matters relating to the development of the Regional Plan are not discussed.

40 **NOTIFICATION OF MEETING**

40.1 Members of committees and subcommittees shall receive written notifications of all NCRPC meetings no later than one week prior to any called meeting date. Notification of unscheduled meetings may be made by telephone no less than one week prior to the meeting.

41 **MINUTES**

41.1 Minutes of all committee and subcommittee meetings shall be taken and copies shall be sent to the Secretary/Treasurer of the Regional Planning Committee for retention. Minutes of all Regional Planning Committee meetings shall be provided to all members of record at the time of the meeting.

42 **ELECTION OFFICERS**

42.1 The Regional Planning Committee shall elect a Chairman, Vice-Chairman, Secretary/Treasurer and Membership Secretary, by ballot conducted at the first Formal Organization of Regional Planning Committee meeting. A slate of nominees shall be placed in nomination to the Regional Convener by the Nominating Committee of the Steering Committee. The Regional Convener shall additionally call for nominations from the floor. All nominees for any office shall have at the time of the election a written statement from their employer organization or agency that the individual has the official sponsorship of the employing agency, and will be permitted to devote adequate time, effort and resources on the project as necessary to satisfactorily accomplish the development of the Regional Plan.

43 **TERM OFFICE**

43.1 The initial term office shall be two years beginning January 1, or upon election in the first year, and terminating December 31, of the second year. Each Regional Planning Committee Officer shall serve a normal term office or until a replacement is elected or named to the office.

- 43.2 Each Regional Planning Committee officer shall be eligible to succeed himself for one additional term.
- 43.3 After the initial term office, elections shall be held for Chairman and Secretary/Treasurer in each odd numbered year. After the initial term office, elections shall be held in each even numbered year for Vice-Chairman and Membership Secretary.
- 43.4 Elections shall be from a slate of nominees selected from the members of record named by a three member nominating committee appointed by the Chairman.
- 43.5 The names of the nominating committee shall be made public by the Chairman at least one month prior to any election.
- 43.6 Persons interested in holding office in the Regional Planning Committee shall contact the nominating committee making their interest known and providing the official endorsement of their employing agency.
- 43.7 All candidates for office shall provide a written statement from their employer indicating the individual has the official sponsorship of the employing agency and will be permitted to devote the time, effort and resources necessary to satisfactorily accomplish the objectives and duties of the chosen office.

44 TECHNICAL REGIONAL PLAN REQUIREMENTS

44.1 APCO FREQUENCY SORTING PROGRAM

The APCO frequency packing programs are a series of programs that create an allocation table of frequencies usable within an area based on certain distance separation rules. These separation rules are an approximation of several engineering principles which dictate the necessary separation between co channel and adjacent channels stations in "real world" environments.

- 44.2 The methodology itself is not an engineering program but a planning tool used in the allotment of channels in accordance with the national NPSPAC plan and the 55 regional plans resulting from same.
- 44.3 Certain assumptions are made in the execution of the program. These are the probable 40/5dbu separation for co-channel allotments, the 40/20 dBu separation for adjacent channels and the fact that the 800 MHz environment is quite favorable for the use of transmitter combiners, antennas with specific highly directional patterns, and the use of simulcast for systems required to cover an area larger than (typical) 15 miles in a base-to-mobile configuration and 8 miles in radius in Base/Portable configuration.
- 44.4 Differences in terrain, anomalies in coverage, and other factors in the "real world" dictate accommodation in this or any other RF planning process. in the case of NPSPAC planning regions this can be accommodated in advance of the packing process by indicating those sites and geo-political areas that have sites with exceptional coverage (due to height advantage or other anomaly). These sites are then placed in the data file with coverage radius's much larger than indicated above to reflect the actual environment.

- 44.5 Other anomalies found after the packing process is complete such as high signal level coverage within an urban area are accommodated through design of a system intentionally protecting co and adjacent channel users (potential or planned).
- 44.6 The method used in determining an allotment of a channel is to analyze both the co channel and adjacent channel distances relative to the project coverage areas for each site in a new system.
- 44.7 The decision to allot a channel to a geographic area is through a formula solution (D/R) where D must equal at least 5 times the larger radius (R) of coverage plus one times the smaller radius of coverage, the subject coverage specified is the 40 dbu coverage contour.
- 44.8 Co-channel assignments must meet a D/R of 5.0 or greater in order to be considered allottable. Adjacent channel assignments must meet a 3.5 ratio for acceptability.

45 PROGRAM PATH

- 45.1 The program process begins with the creation of a "circulation" file by the National APCO office. This file is created by the ATLAS GRAPHICS (TM) program. These files are then managed by a program to create a flat file containing anywhere from one to a hundred entries representing a geo-political area.
- 45.2 This data is then developed into separate files containing a "request" criteria of one to several circles (Lat/Long/Radius). A separate file is generated containing the name of each of the requester files and the number of channels to be located for each area. Larger areas, consisting of more than one geo-political area, called a zone, are also created to reflect state government or regional government or authorities, usually a US Bureau of Census SMSA or an exiting multi-county governmental region.
- 45.3 Each requester file is then compared against each record in a file creating a temporary file containing the results. This file is analyzed for records meeting the 5.0×3.5 spacing factors according to an assignment matrix. The requested number of channels meeting the criteria (if available) are then added to the file and the process begins again with the next requestor.
- 45.4 Results are generated throughout the process by noting the "success" level of each iteration on a printer and finally through printing a report for the particular region.

46 FUTURE CHANGES AND ADDITIONS TO A REGIONAL PLAN PACKING

- 46.1 The NPSPAC planning process, like any good planning process, is subject to change as conditions within the region change. These changes, usually a need for additional channels within a planning area, can be accommodated through this packing software.
- 46.2 Any future amendment or revision of the regional channel assignment plan must be submitted through the APCO Area Frequency Coordinators office in order to assure compatibility with the other assignments within the region and adjoining regions.
- 46.3 By reserving the "PACC" channels for use primarily in nonstandard systems which don't require a full block in a given area, standard groups, sets, and blocks will be broken less often and less consideration or coordination will be required when initially assigning those blocks.

- 46.4 The PACC channels, because of their organization, have a minimum expected channel-to-channel spacing of 0.125 MHz. The clusters listed indicate the preferred assignment of up to four channel systems, but since they are not intended to be used only as clusters of four channels, they will be referred to and considered individually with no further implied relationships. Whenever possible "PACC" channels will be assigned from a cluster which has an available channel capacity that most closely meets the needs of the applicant.

47 SPECTRUM UTILIZATION

- 47.1 This portion of the plan provides a basis for proper spectrum utilization. Its purpose is to guide the NCRCP Committee in their task of evaluating the implementation of radio communication systems within the North Carolina region.
- 47.2 All communications systems incorporating five (5) or more channels will be required to be configured and operated in a trunked configuration. Those systems having four (4) or fewer channels may be configured in a conventional system configuration.
- 47.3 The Federal Communications Commission in its report and order states: "Exceptions will be permitted only when a substantial showing is made that alternative technology would be at least as efficient as trunking or that trunking would not be (sic) operational requirements. Exceptions will not be granted routinely. However, strong evidence showing why trunking is unacceptable must be presented in support of any request for exception." Systems of 4 or less channels operating in the conventional mode that do not meet FCC loading standards will be required to share the frequency on a nonexclusive basis.
- 47.4 Those systems that are designed to provide wide area communications coverage must demonstrate their need to require such coverage. Communication coverage beyond the bounds of a jurisdictional area of concern cannot be tolerated unless it is critical to the protection of life and property and can be so demonstrated. If the 800 MHz trunked radio technology is utilized the system design should include as many county/multiple municipality government public safety radio users as can be managed technically.
- 47.5 The county/multiple municipality agency or agencies depending upon systems loading and a need for multiple systems within an area must provide inter-communication between area wide systems in a multi-agency environment. A lead agency using 800 MHz spectrum must implement the common channels in this band as mandated by the national plan. Such implementation must be reviewed and approved by the NCRCP Committee.
- 47.6 Communications for public safety purposes should provide only the communications needed within its boundaries; however, if the total number of radios in service does not reach minimum loading criteria for a trunk system that municipality should consider implementing an interagency shared system with other users.
- 47.7 Where conventional 800 MHz needs are requested, those frequencies to be utilized must not interfere with the region's trunked systems. The 800 MHz trunk radio system is to be considered in greater compliance with the FCC guidelines. Any co-channel interference within an authorized area of coverage will be examined on a case by case basis.
- 47.8 Loading of channels will be in compliance with FCC Rules 90.631 and 90.633. This plan must be used as a guide when establishing any new systems. Overlap or extended coverage must be minimized.

- 47.9 Antenna heights are to be limited to provide only the necessary coverage. The system design shall produce the minimum necessary coverage pattern and effective radiated power for the required geographic area.
- 47.10 Separation of co-channel transmitters will be determined after consideration of the applicants coverage needs, topography, natural barriers and antennae patterns.

48 COORDINATION APPLICATION FORMS

- 48.1 Coordination and Application forms will be adopted by this planning region and will be in conformance with the forms developed by the recognized national frequency coordinator.

49 FREQUENCY APPLICATION PROCESS

- 49.1 To develop an effective and functional plan the following recommendations shall be adopted:
- 49.1.1 A frequency assignment algorithm shall be developed and implemented by the frequency coordinator responsible for the 800 MHz spectrum within North Carolina Region 31.
- 49.1.2 An engineering study shall be provided with each application which describes the geographic location of the site and the technical parameters of the system. Coverage predictions shall be included which are based on that information. The predictions shall define a coverage contour where a minimum signal level of 40 dBu will be provided in accordance with FCC Rule 90.621(c). The coverage prediction shall be provided on a map of 1:25000 scale which clearly shows the location(s) of the proposed transmitters, the political boundaries of the licensee(s), the county and state lines, and the closest adjacent and co-channel system(s), if within 35 and 70 miles respectively. In addition to the eight standard radials used to determine height above average terrain, one radial between each proposed location and its nearest adjacent and co-channel stations shall be included in a fashion similar to FCC Rule 90.309(a)(4).
- 49.1.3 A clearly written narrative explanation of the need for the system shall be provided by the applicant agency.
- 49.1.4 A financial and budget commitment from the applicant agency or governmental agency requesting the frequency and responsible for the implementation shall be provided by the applicant agency. An applicant's commitment to implement the system must be ensured to maintain the efficient utilization of the 800 MHz frequencies. The funding statement, which shall be in the form of a resolution from the applicant's governing body, shall be included in the application including the method by which the system will be funded.
- 49.1.5 An implementation schedule describing development of the system from the first original system implementation to the fully loaded eventual system implementation.
- 49.1.6 A certification, provided by the applicant agency, that shows compliance with the national plan common channel requirements, and stating how the common channels will be implemented within the system.
- 49.1.7 An applicant shall be required to furnish a schedule detailing the time period required to implement the proposed communications system, including statements to show the progress, including: funding, initial planning, procurement, implementation, initial

acceptance, initial operation, system optimization, final acceptance, and maintenance scheduling.

- 49.2 All trunked systems authorized in accordance with this plan shall comply with section 90.631(e) regarding the implementation of systems. All conventional systems shall comply with section 90.633.

50 APPEAL PROCESS

Applicants shall be given the opportunity to appeal decisions which result in the rejection of their application throughout the application and frequency allocation process.

- 50.1 Throughout the channel allocation process applicants are given opportunities to appeal decisions which caused rejection of their application. The appeal process has two levels; APCO (or the FCC designated frequency coordinator) then to the Federal Communications Commission. An applicant who decides to appeal a rejection should initiate that appeal immediately with APCO upon notification of the rejection. In the event an appeal reaches the second level, the Federal Communication Commissions decision will be final and binding upon all parties.

51 COMMON CHANNEL IMPLEMENTATION

- 51.1 The eligible users in each planning area shall develop an implementation plan for their area based upon a two-tier implementation concept. The plan shall identify the location, frequency, operating parameters of the proposed stations in the area, and the name of the responsible monitoring agency and responsible system agency, if not the same.
- 51.2 The first tier of the plan shall consist of one or more stations operating on the National Calling Channel. The coverage of the stations shall be designed so as to provide coverage throughout a major portion of the area. Stations may be either mobile relay stations (FB2) or base stations (FB) provided that base stations must be capable of reverting to mobile relay operation upon failure of a control line, control link or control path.
- 51.3 The monitoring agency shall provide a continuous and effective watch on the nationally designated National Mutual Assistance System (NMAAS) calling channel.
- 51.4 The second tier shall consist of stations operating on the four National Common TACTical Channels (TAC 1, TAC 2, TAC 3, TAC 4). The coverage area of the stations shall be designed so as to maximize utilization of the TAC channels.

52 MUTUAL AID CHANNEL UTILIZATION

The mutual aid channels are to be used for coordination activities between different agencies in a mutual aid situation, or emergency activities of a single agency. Priority use levels are described below. When a higher priority of use is required all lower priority use must cease in any area where interference could occur.

- 52.1 **PRIORITY 1** - Disaster and extreme emergency operations, for mutual aid and interagency communications.
- 52.2 **PRIORITY 2** - Emergency or urgent operations involving imminent danger to the safety of life or property.

- 52.3 **PRIORITY 3** - Special event control activities, generally of a preplanned nature and generally involving joint participation of two or more licensed agencies, including drills, tests and exercises of disaster or emergency plans.

53 **INTEROPERABILITY - COMMON CHANNEL IMPLEMENTATION**

In accord with the National Plan, interoperability among federal, state and local governments during both routine and disaster operations will take place primarily on the five common channels designated as the "Calling Channel" and channels "TAC 1 through TAC 4."

54 **STANDARD SUBAUDIBLE CONTINUOUS TONE SQUELCH**

- 54.1 All mobile and portable radios operating in the 821-824/866-869 MHz frequency band shall be equipped to operate on the five common channels using CTCSS frequency of 156.7 Hz. (Ref. General Docket No. 87-112 par. III.C.2.28.(3))
- 54.2 Additionally through the use of S-160 or equivalent agreements a licensee may permit federal use of a nonfederal communications system. Such use other than the five identified common channels is to be in full compliance with FCC requirements for federal government use of nonfederal government frequencies.
- 54.3 The implementation of the common channels designated by the National Plan will separate into two categories designated as: Primary and Secondary.
- 54.3.1 **PRIMARY USERS** - All licensees of five or more 800 MHz channels. As a minimum, all primary users shall operate a receiver for continuous monitoring of the "Calling Channel" and a single separate mobile relay/base station that is equipped to operate on all five of the national common channels.
- 54.3.2 Wide area coverage transmitters will be required to be installed to assure area of responsibility coverage. Licensees must be willing to sponsor provision of sufficient satellite receivers for in-street mobile coverage within a system's area, consistent with the coverage requirement.
- 54.3.3 A continuous monitor of the Calling Channel will be maintained using control stations. Any or all agencies may be required to operate a control station for the purpose of monitoring and rendering assistance on the Calling Channel.
- 54.3.4 Direct communications "talk-around" on all four tactical channels will provide additional on scene communications to supplement the mobile relay base stations.

55 **SECONDARY USERS**

- 55.1 Secondary Users are All licensees of four or fewer 800 MHz channels.
- 55.2 All users of four or fewer channels shall, as a minimum, operate a base station for continuous monitoring of the national Calling Channel. All secondary users shall maintain a radio watch for the purpose of monitoring and rendering assistance on the Calling Channel.

- 55.3 A secondary user whose area is encompassed by a primary user may apply for a waiver for the full time monitoring of the Calling Channel, however, the secondary user shall be required to maintain a control station on the national Calling Channel.

56 OPERATING PROCEDURES ON THE COMMON CHANNELS

- 56.1 Normally, the five interoperable channels are to be used for activities requiring inter-communications between agencies not sharing any other compatible communications system. Interoperable channels are not to be used by an agency for daily operations or for interagency communications not requiring interoperability. In major emergency situations, one or more tactical channels may be assigned as deemed necessary.
- 56.2 Participants in the interoperable channels include federal, state and local disaster management agencies. Police, fire, and certificated providers of basic and advanced life support services will be the primary using agencies. If radio channels are available, other services provided for in the Public Safety Radio Services and the Special Emergency Radio Service may also participate to the extent required to insure the safety of the public and protection of property.

57 OPERATING PROCEDURES

Plain-text "English" language will be used on all five common channels at all times. The use of unfamiliar terms, phrases and codes shall be kept to a minimum. The use of the common channels for normal dispatch or routine agency operations is specifically prohibited.

- 57.1 **CALLING CHANNEL** - The Calling Channel shall be used to contact other users that can render assistance at an incident. It shall not be used as an ongoing working channel. Once contact is made between agencies, an agreed upon, assigned or predetermined tactical channel shall be used for additional or continued communications.
- 57.2 **TACTICAL CHANNELS (TAC 1 - TAC 4)** - These frequencies are reserved for use by those agencies involved in interagency or intersystem communications. Incidents requiring multiagency participation will utilize these channels as directed by the agency with responsibility for the incident or area of operation.

58 NETWORK OPERATING METHODS

- 58.1 A network will be established on the Calling Channel. The network will be wide area in nature and cover the major sections of North Carolina Region 31. Multiple networks may be required to fully cover outlying areas. Communications systems on TAC 1 - TAC 4 will be implemented by agencies who volunteer on a coordinated basis through system application.
- 58.2 Every geographic section of the North Carolina Region 31 is intended to be covered by at least one of the working tactical channels. In areas not supporting an 800 MHz trunked system, common channels will be utilized through mobile-to-mobile "talk around." Mobile relay stations on TAC 1 - TAC 4 will be of a limited coverage design to permit reuse of the channels several times within North Carolina Region 31.
- 58.2.1 One channel will be designated as federal for use primarily between federal agencies, or between federal and state or local agencies.

- 58.2.2 One channel will be designated as state for use primarily between state agencies, or between state and federal or state and local agencies.
- 58.2.3 One channel would be designated as local for use primarily between local agencies, or between local and state or federal agencies.
- 58.2.4 One channel will be left for noncritical communications, which would be secondary to any essential local, state, or federal communications.
- 58.3 This plan will allow the local users to implement one calling channel and one "local" channel. The state or federal government will then be able to implement its "own channel" in areas deemed necessary. This also allows a state or federal agency to bring in a temporary or itinerant station for use during emergency response or drills. The local cost and responsibility are only to provide a method to coordinate the use of the agencies (calling channel) and their "own" working channel. In cases where a federal or state channel is not warranted, the state or federal agency can still communicate to others on a secondary basis using the local channel. Those areas with sufficient local funding can implement a second (nonessential) working channel without affecting the "state" or "federal" channel operations.
- 58.4 On these channels, mobile relays are allowable, but not mandated.

59 LONG-RANGE COMMUNICATIONS

- 59.1 Planning for "long range" communications, those required beyond the local system capability, during incidents of major proportions, where public safety requirements dictate the need for communications in and out of a disaster area, shall be addressed by the primary users within the service area. These agencies shall integrate the appropriate interface to the National Calling Channel as a minimum. The long range communications may additionally require or include interconnection with private carrier systems or the public switched network.

60 FREQUENCY GIVE-BACK AND REASSIGNMENT

- 60.1 It is anticipated that in all but the most unusual cases, frequencies presently used by a licensee will be turned back for reassignment. Frequency coordinators for the service affected will be responsible for reassignment of the channels to other agencies awaiting channels in the Public Safety Communications lower frequency bands. Normal coordination procedures will be followed with these "give-back" frequencies.
- 60.2 All frequencies are to be returned to their respective pools to be assigned for the most beneficial public use. The frequency coordinator will consider the communication needs of all current eligible under the FCC's Services.

61 EXPANSION OF EXISTING SYSTEMS

- 61.1 Existing systems that are to be expanded to include the frequency bands of 821-824/866-869 MHz must have their mobile radios "grandfathered" and modified in conformance with the Memorandum Opinion and Order, FCC Docket 87-112. Existing base stations in the frequency bands of 806-821/851-866 MHz may not be used in the frequency bands of 821-824/866-869 MHz.